# EAGLE
# *Tinting and Mixing Chart*

**FOR THE MASTER PAINTER**

EAGLE
EP
PICHER

EAGLE-PICHER
CINCINNATI, OHIO
WHITE LEAD
*Lasts*

important that the contracting painter observe this point and permit his customers to select only those colors which will endure satisfactorily according to the exposure involved.

## USE QUALITY COLORS IN OIL

Do not purchase colors-in-oil on a price basis. Buy a master painter's product of the very finest quality. The first cost will be slightly higher, but that small extra cost will be your guarantee of a quality, long-lasting job.

## MATCHING COLORS

When matching one color against another, it is very important to remember that enamels and gloss paints appear lighter when they are wet than when they are dry. They darken when dry and they grow still darker with age. Therefore, do not proceed with your painting work until you have matched the color, painted out a panel, and let this panel dry thoroughly. Its color value can then be accurately compared with the surface or color which you are matching. You may discover that you will have to lighten up your paint before going ahead with the job.

## LIGHT CREAMS AND DELICATE IVORIES

Use only Raw Sienna or Pure French Ochre to obtain these shades. We advise against making these colors from Cream or Yellow. A tint made from French Ochre will be more permanent against fading or after-discoloration.

## LAMPBLACK

Use this color-in-oil only to obtain a deep blue black, or for very light grays. The nature of this color has a tendency to retard or slow up drying. It is, therefore, recommended that you use a little more than the ordinary amount of Japan Drier.

## DROP BLACK

Use this for very dark or jet black tones and for general darker tinting.

## COLOR MIXING

Color mixing is easily done in a few simple steps. Put the tinting color in a separate small container. If using the heavy paste colors-in-oil, add turpentine slowly and take especial care to beat up the mixture until it reaches a smooth, creamy consistency. Add the turpentine in small amounts, because by so doing you are able to break up the colors-in-oil more thoroughly. Eliminate all small lumps.

Some painters gray off the tinting color by adding a small amount of Eagle White Lead before straining it into the white lead mixing bucket. Add the colors-in-oil in small quantities and continue to stir thoroughly. After it is all stirred into the lead, the necessary amount of turpentine should be added. The addition of drier is always the last step in the mixing. The paint is now ready for straining. Use a wire screen if it is to be brushed on exterior surfaces. If it is to be used for interior work, it is well to strain it through two or three thicknesses of cheese cloth.

## LET IT STAND BEFORE USING

The batch of paint should not be used immediately after mixing and tinting. If you will let it stand for a day or over night, the white lead will continue to absorb linseed oil. Consequently it will spread out better—be free from brush marks.

## COLOR REFLECTIVITY

Under each of the color chips in this book you will find reflectivity figures. These indicate the amount of light that the color reflects. Familiarize yourself with them so that you can use them in your sales work. Your customers, no matter whether they are home-owners or industrialists, will be interested; for they realize that the reflectance of a color has a direct bearing on such things as electric light bills and eye strain. This situation has been brought about mainly through the Better Light — Better Sight Campaign — a movement that has the wholehearted cooperation of some of the largest manufacturers in the country.

## FORMULAS FOR EXTERIOR COLORS

## FORMULAS FOR INTERIOR COLORS

● The quantities of color shown below are based on the use of 100 lbs. of Eagle White Lead reduced to painting consistency. Add the proper colors slowly to the paint until you secure the tint you want, stirring well to thoroughly mix in the color.

- **LIGHT GREEN**
  ¾ pt. Lt. Chrome Green
  1 pt. Raw Sienna
- **LIGHT PRIMROSE**
  1/12 pt. Med. Chrome Yellow
- **DARK BLUE**
  2 pts. Prussian Blue
- **LIGHT BUFF**
  1/5 pt. Medium Yellow
  1/5 pt. Orange Chrome Yellow
- **STONE GRAY**
  ½ pt. Burnt Umber
  ⅛ oz. Lampblack
- **DEEP CREAM**
  1 pt. French Ochre
  ¾ pt. Medium Yellow
- **LIGHT BLUE**
  1/10 pt. Prussian Blue
- **PRIMROSE**
  1/5 pt. Lt. Chrome Yellow
  1/10 Pt. Lt. Chrome Green
- **SILVER GRAY**
  1/10 pt. Lampblack
- **CANARY**
  ½ pt. Lt. Yellow
  1/10 pt. Medium Yellow
- **LEAD**
  1 pt. Lampblack
- **DRAB**
  ¾ pt. Van Dyke Brown
- **DEEP TAN**
  ½ pt. Burnt Sienna
  1 pt. Raw Sienna
  1/6 pt. Lampblack
- **BUFF**
  ¾ pt. Burnt Sienna
  1½ pt. Raw Sienna
- **VENETIAN RED**
  No White Lead required
- **LIGHT TAN**
  1¾ pt. French Ochre
- **GREEN GRAY**
  1/20 pt. Lt. Chrome Green
  1/15 pt. Raw Umber
- **DUTCH GRAY**
  1/3 pt. Van Dyke Brown
- **PEA GREEN**
  1/3 pt. Lt. Yellow
  ¼ pt. Lt. Green
- **LIGHT GRAY**
  Trace of Lampblack
- **MOSS GREEN**
  10 pts. French Ochre
  ¾ pt. Prussian Blue
- **OLD IVORY**
  1/5 pt. Chrome Yellow
  1/16 pt. Raw Umber
- **FOREST GREEN**
  No White Lead required
- **COLONIAL YELLOW**
  1 1/3 pts. Medium Yellow

- **SEA GREEN**
  2 pts. Medium Chrome Green
  1 pt. Raw Sienna
- **LIGHT LEMON**
  ¼ pt. Lemon Chrome Yellow
- **WILLOW GREEN**
  1/3 pt. Lt. Chrome Green
- **IVORY**
  ¼ pt. French Ochre
- **SAND**
  1/10 pt. Burnt Umber
  1/10 pt. Raw Umber
- **DUTCH BLUE**
  1 pt. Cobalt Blue
- **PEACOCK GREEN**
  1 1/3 pts. Lt. Chrome Green
  ⅝ pt. Prussian Blue
- **SHELL PINK**
  1/16 pt. Venetian Red
  ⅛ pt. Medium Chrome Yellow
- **ORCHID**
  ½ pt. Tuscan Red
- **PEARL GRAY**
  ½ pt. Raw Umber
- **OLD BLUE**
  3/5 pt. Prussian Blue
  ⅛ pt. Tuscan Red
- **SKY BLUE**
  ½ pt. Cobalt Blue
- **PINK**
  1 pt. English Venetian Red Deep
- **ECRU**
  1/10 pt. Burnt Umber
- **HONEY DEW**
  ½ pt. Medium Chrome Yellow
  ½ pt. Orange Chrome Yellow
- **STRAW**
  1 pt. French Ochre
  Trace of Venetian Red
- **ROSE**
  ⅛ pt. Burnt Sienna
  1/5 pt. Tuscan Red
- **PRISCILLA GRAY**
  ¼ pt. Van Dyke Brown
- **LT. SEA GREEN**
  ½ pt. Lt. Chrome Green
  1/3 pt. Raw Sienna
- **PEACH**
  ½ pt. English Venetian Red
  ⅛ pt. Medium Chrome Yellow
- **LIGHT FAWN**
  1/5 pt. Van Dyke Brown
  1½ pts. Raw Sienna
- **CREAM**
  ½ pt. Raw Sienna
- **APPLE GREEN**
  1 pt. Lt. Chrome Green
- **JONQUIL**
  ⅛ pt. Medium Chrome Yellow
  1/3 pt. Light Chrome Yellow

## EAGLE WHITE LEAD EXTERIOR COLOR SUGGESTIONS

| | *TRIM* | | *BODY* | |
|---|---|---|---|---|
| FP | LIGHT GREEN<br>52—55% | . . . Light Reflectivity . . . | LIGHT PRIMROSE<br>73—76% | P |
| FP | DARK BLUE<br>15—21% | . . . Light Reflectivity . . . | LIGHT BUFF<br>56—60% | P |
| P | STONE GRAY<br>40—46% | . . . Light Reflectivity . . . | DEEP CREAM<br>64—68% | P |
| F | LIGHT BLUE<br>51—54% | . . . Light Reflectivity . . . | PRIMROSE<br>70—74% | FP |
| P | SILVER GRAY<br>53—58% | . . . Light Reflectivity . . . | CANARY YELLOW<br>72—75% | P |
| P | LEAD<br>14—18% | . . . Light Reflectivity . . . | DRAB<br>42—47% | P |

| | *TRIM* | | *BODY* | |
|---|---|---|---|---|
| P | DEEP TAN<br>29—33% | . . . Light Reflectivity . . . | BUFF<br>47—52% | P |
| P | VENETIAN RED<br>23—26% | . . . Light Reflectivity . . . | LIGHT TAN<br>57—62% | P |
| FP | GREEN GRAY<br>35—38% | . . . Light Reflectivity . . . | DUTCH GRAY<br>53—56% | P |
| FP | PEA GREEN<br>44—48% | . . . Light Reflectivity . . . | LIGHT GRAY<br>68—72% | P |
| FP | MOSS GREEN<br>24—28% | . . . Light Reflectivity . . . | OLD IVORY<br>72—76% | P |
| P | FOREST GREEN<br>8—10% | . . . Light Reflectivity . . . | COLONIAL YELLOW<br>66—70% | P |

## EAGLE WHITE LEAD INTERIOR COLOR SUGGESTIONS

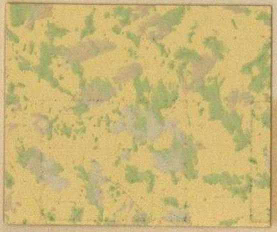
| | *WALL* | | *CEILING* | |
|---|---|---|---|---|
| FP | SEA GREEN<br>45—48% | . . . Light Reflectivity . . . | LIGHT LEMON<br>76—78% | P |
| F | WILLOW GREEN<br>67—72% | . . . Light Reflectivity . . . | IVORY<br>74—78% | P |
| P | SAND<br>54—57% | . . . Light Reflectivity . . . | DUTCH BLUE<br>51—54% | FP |
| FP | PEACOCK GREEN<br>35—39% | . . . Light Reflectivity . . . | SHELL PINK<br>66—70% | P |
| P | ORCHID<br>42—45% | . . . Light Reflectivity . . . | PEARL GRAY<br>73—77% | |
| FP | OLD BLUE<br>48—52% | . . . Light Reflectivity . . . | SKY BLUE<br>62—65% | FP |

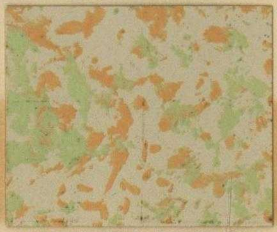
| | *WALL* | | *CEILING* | |
|---|---|---|---|---|
| P | PINK<br>65—68% | . . . Light Reflectivity . . . | ECRU<br>69—74% | P |
| FP | HONEY DEW<br>60—65% | . . . Light Reflectivity . . . | STRAW<br>65—69% | P |
| P | ROSE<br>60—65% | . . . Light Reflectivity . . . | PRISCILLA GRAY<br>68—73% | P |
| FP | LIGHT SEA GREEN<br>52—55% | . . . Light Reflectivity . . . | PEACH<br>68—72% | FP |
| P | LIGHT FAWN<br>68—73% | . . . Light Reflectivity . . . | CREAM<br>76—81% | P |
| F | APPLE GREEN<br>44—47% | . . . Light Reflectivity . . . | JONQUIL<br>70—74% | P |

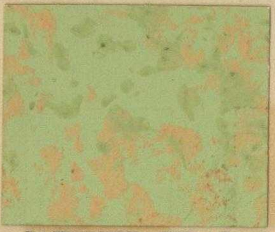
**KEY**
**TO COLOR PERMANENCE**
●
P....Permanent
FP..Fairly Permanent
F....Fugitive

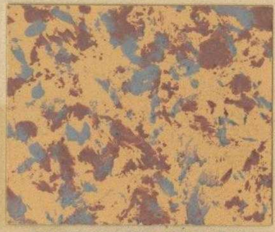
## EAGLE RUST-PREVENTIVE PIGMENTS

| 80% Sublimed Blue Lead<br>20% Chrome Yellow | Pure Red Lead | 99% Pure Red Lead<br>1% Carbon Black | Pure Sublimed Blue Lead | 75% Sublimed Blue Lead<br>25% Red Lead |
|---|---|---|---|---|


BACKGROUND—Cream
MOTTLE—Apple Green and Pearl Gray


BACKGROUND—Priscilla Gray
MOTTLE—Honey Dew and Willow Green


BACKGROUND—Willow Green
MOTTLE—Shell Pink and Apple Green


BACKGROUND—Shell Pink
MOTTLE—Orchid and Dutch Blue

# FORMULAS FOR PAINTING WITH

# EAGLE PURE WHITE LEAD

## ALL-PURPOSE PASTE

**Eagle All-Purpose White Lead is made from pure metallic lead. The lead is first corroded, then ground with linseed oil. Turpentine is then added, and the lead is reground by a special process. The finished product, Eagle All-Purpose White Lead, may be used on interiors and exteriors.**

## HEAVY PASTE

**Eagle Heavy Paste White Lead, like All-Purpose Paste, is made from pure lead, corroded and ground with linseed oil. It does not, however, contain turpentine, so when using this paste, change the formulas below, as indicated. This product may be used on interiors or exteriors.**

## EXTERIOR WOOD

| Materials | OLD WORK (Two Coats) | | | NEW WORK (Three Coats) | | | |
|---|---|---|---|---|---|---|---|
| | First Coat | Second Coat | Second Coat Flat | Priming Coat | Second Coat | Third Coat | Third Coat Flat |
| **All-Purpose** White Lead | 100 lbs. | 100 lbs. | 100 lbs. | 100 lbs. | 100 lbs. | 100 lbs. | 100 lbs. |
| Pure Raw Linseed Oil* | 2¼ gals. | 3 gals. | None | 4 gals. | 1¾ gals. | 3 gals. | None |
| Pure Turpentine or Eagle Flatting Oil† | 1¼ gals.** | None‡ | 2¼ gals.** | 1¼ gals.** | 1¼ gals.** | None** | 2¼ gals.** |
| Best Japan Drier | 1 pint | 1 pint | None | 1 pint | 1 pint | 1 pint | None |
| Approximate amount of paint | 6⅝ gals. | 6⅛ gals. | 5¼ gals. | 8⅜ gals. | 6⅛ gals. | 6⅛ gals. | 5¼ gals. |
| Approximate weight per gal. | 18¼ lbs. | 20¼ lbs. | 22 lbs. | 16½ lbs. | 18½ lbs. | 20¼ lbs. | 22 lbs. |

## INTERIOR WOOD

| Materials | OLD WORK (Two Coats) | | | NEW WORK (Three Coats) | | | |
|---|---|---|---|---|---|---|---|
| | First Coat | Second Coat Oil Gloss | Second Coat Flat | Priming Coat | Second Coat | Third Coat Oil Gloss | Third Coat Flat |
| **All-Purpose** White Lead | 100 lbs. | 100 lbs. | 100 lbs. | 100 lbs. | 100 lbs. | 100 lbs. | 100 lbs. |
| Pure Raw Linseed Oil* | 1 gal. | 3-3½ gals. | None | 3 gals. | 1½ gals. | 3-3½ gals. | None |
| Pure Turpentine or Eagle Flatting Oil† | 2¼ gals.** | None‡ | 2¼ gals.** | 2¼ gals.** | 1¼ gals.** | None‡ | 2¼ gals.** |
| Pale or White Enamel Varnish | None | None | 1 pint†† | None | None | None | 1 pint†† |
| Best Japan Drier | 1 pint | 1 pint | None | 1 pint | 1 pint | 1 pint | None |
| Approximate amount of paint | 6⅜ gals. | 6⅛-6⅝ gals. | 5⅜ gals. | 8⅜ gals. | 5⅞ gals. | 6⅛-6⅝ gals. | 5⅜ gals. |
| Approximate weight per gal. | 19½ lbs. | 20 lbs. | 21¾ lbs. | 16¾ lbs. | 20¾ lbs. | 20 lbs. | 21¾ lbs. |

*If thinner brushing consistency is desired, **do not** add more linseed oil—reduce with turpentine or flatting oil.

†Eagle Flatting Oil is recommended for its smoother brushing and greater wearing quality, and because it produces better and more lasting finishes.

**When **HEAVY PASTE** is used, add 1 quart of Eagle Flatting Oil or Pure Turpentine.

‡When **HEAVY PASTE** is used, add 1 pint of Eagle Flatting Oil or Pure Turpentine.

††If flatting oil is used, no varnish is necessary.

## EXTERIOR OR INTERIOR MASONRY AND PLASTER, INTERIOR WOOD

| Materials | OLD WORK (Two Coats) | | NEW WORK (Three Coats) | | |
|---|---|---|---|---|---|
| | First and Second Coats Flat | Second Coat Semi-Gloss | Priming Coat | First and Second Coats Flat | Second Coat Semi-Gloss |
| **All-Purpose** or **Heavy Paste** White Lead | 100 lbs. | 100 lbs. | 100 lbs. | 100 lbs. | 100 lbs. |
| Eagle Lead Reducing Oil* | 3-4 gals. | 2-3 gals. | 4-5 gals. | 3-4 gals. | 2-3 gals. |
| Spar Varnish | None | 1 gal.** | None | None | 1 gal.** |
| Approximate amount of paint | 6-7 gals. | 6-7 gals. | 7-8 gals. | 6-7 gals. | 6-7 gals. |
| Approximate weight per gal. | 20-18¼ lbs. | 20¼-18½ lbs. | 18¼-17 lbs. | 20-18¼ lbs. | 20¼-18½ lbs. |

*Eagle Lead Reducing Oil is recommended for use with Eagle White Lead for all porous surfaces. It makes an excellent seal, and an especially tough, durable and washable film. Use the minimum amount of Lead Reducing Oil when greatest opacity is desired.

**This quantity may be reduced to produce degree of gloss desired. Any reduction in varnish content must be offset by addition of reducing oil.

# THE COST OF A GALLON OF PAINT MADE FROM EAGLE WHITE LEAD IS SURPRISINGLY LOW

**When you buy paint, you want a product that will last and give satisfactory service, but you don't want to pay too much for it. White lead meets the first requirement, as everyone knows. But how about the second? Is it expensive—too expensive to use on every job? Or is it low in cost?**

**Some painters think one way, some another. But don't take their word for it. Figure it out for yourself. Then you'll know that you have the correct answer.**

**Figuring the gallon cost of white lead is easy. You merely add the cost of ingredients used to thin it down to painting consistency and divide by the number of gallons of paint made. Using the formula recommended in this folder for a gloss third coat on new exterior work, the problem would be set up like this:**

100 lbs. Eagle White Lead $__________

3 gals. Linseed Oil __________

1 pt. Japan Drier __________

Cost of 6⅛ gals. White Lead Paint __________

Cost of 1 gal. White Lead Paint __________

**When you have found what it costs to make a gallon of paint from Eagle White Lead, compare this figure with the price of other paints. Start with the cheapest, then go on up the scale until you reach the top. You'll learn that white lead actually sells for a very low price.**

▼

**THE EAGLE-PICHER LEAD COMPANY**
**TEMPLE BAR BUILDING**
**CINCINNATI, OHIO**

A18 Grier 10-36

Digitized by:

INTERNATIONAL

ASSOCIATION
FOR
PRESERVATION
TECHNOLOGY,
INTERNATIONAL
www.apti.org

BUILDING
TECHNOLOGY
HERITAGE
LIBRARY

https://archive.org/details/buildingtechnologyheritagelibrary

From the collection of:
Mike Jackson, FAIA